

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ARNO HAMAEKERS

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Appeal No. 97-0766  
Application No. 08/287,448<sup>1</sup>

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ON BRIEF

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Before MEISTER, ABRAMS, and NASE, Administrative Patent Judges.

NASE, Administrative Patent Judge.

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<sup>1</sup> Application for patent filed August 8, 1994.

Appeal No. 97-0766  
Application No. 08/287,448

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 13 through 16 and 18 through 22, which are all of the claims pending in this application.<sup>2</sup>

We AFFIRM-IN-PART.

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<sup>2</sup> Claims 13 through 15, 19 and 20 were amended subsequent to the final rejection.

BACKGROUND

The appellant's invention relates to an annular vibration damping machine element. An understanding of the invention can be derived from a reading of exemplary claims 13 and 18, which appear in the appendix to the appellant's brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Dillman 1955	2,723,573	Nov. 15,
Withers 1994	5,299,468	April 5,
Gebhardt 1986	2,162,611	Feb. 5,

(United Kingdom)

Claims 13 through 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gebhardt.

Claim 16 stands rejected under 35 U.S.C. § 103 as being unpatentable over Gebhardt in view of Dillman.

Claim 18 stands rejected under 35 U.S.C. § 103 as being unpatentable over Gebhardt in view of Withers.

Claims 19 through 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Gebhardt in view of Withers and Dillman.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 12, mailed October 1, 1996) for the examiner's complete reasoning in support of the rejections, and to the appellant's brief (Paper No. 11, filed August 16, 1996) for the appellant's arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the

examiner. As a consequence of our review, we make the determinations which follow.

**Claims 13 through 16**

We do not sustain the examiner's rejection of claims 13 through 15 under 35 U.S.C. § 102(b) as being anticipated by Gebhardt. Likewise, we do not sustain the examiner's rejection of claim 16 under 35 U.S.C. § 103 as being unpatentable over Gebhardt in view of Dillman.

To support a rejection of a claim under 35 U.S.C. § 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Gebhardt discloses a rotary vibration damper. As shown in Figure 2, the rotary vibration damper includes a primary member 1 formed as a flange screwed to a crank shaft (not shown), a secondary member, and a resilient damping layer 3

provided between the members 1, 2. The secondary member includes a support 4, a V-belt pulley unit 5 and a fly wheel-type ring 6. Gebhardt teaches that the primary member 1 together with the resilient damping layer 3 and the support 4 may be obtained as a unit and that the V-belt pulley unit 5 and the fly wheel-type ring 6 can be connected positively or merely by friction to the support 4 forming a unitary assembly with the primary member 1 and the resilient damping layer 3.

The appellant argues (brief, pp. 4-5) that Gebhardt does not disclose the claimed method steps of (1) establishing a uniform clearance between the machine elements (i.e., Gebhardt's member 1 and support 4), and (2) forming a viscoelastic layer in the clearance. We agree. Claim 13 requires that the viscoelastic layer be formed in the clearance established between the machine elements. Gebhardt does not disclose, either expressly described or under principles of inherency, that his resilient damping layer 3 is formed in the clearance established between his machine elements (i.e., Gebhardt's member 1 and support 4). In our opinion, the examiner's speculation (answer, p. 7) that

Gebhardt's resilient damping layer 3 is inherently formed in the gap (i.e., clearance) established between his machine elements is without support. While Gebhardt need not expressly disclose each claimed element/step in order to anticipate the claimed invention (see Tyler Refrigeration v. Kysor Indus. Corp., 777 F.2d 687, 689, 227 USPQ 845, 846-847 (Fed. Cir. 1985)), when relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. See Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Patent App. & Int. 1990). This the examiner has not done.

For the reasons set forth above, the decision of the examiner to reject claims 13 through 15 under 35 U.S.C. § 102(b) is reversed. In addition, the decision of the examiner to reject dependent claim 16 under 35 U.S.C. § 103 is reversed since the limitations of parent claim 13 are not suggested or taught by the applied prior art.

**Claims 18 through 22**

We sustain the examiner's rejection of claims 18 through 22 under 35 U.S.C. § 103.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Claim 18 recites an annular machine part, comprising, inter alia, a planar hub ring, an annular machine element, a layer of viscoelastic material, an annular belt pulley and a flywheel. Claim 18 further recites that the flywheel is attached to an outer surface of the annular belt pulley and



that the annular machine element has an inner wall contiguous with an outer peripheral surface of the hub ring.

The teachings of Gebhardt have been set forth previously.

Withers discloses an elastomeric vibrational damper. As shown in Figure 2, the damper includes a hub section 11, an intermediary mounting member 15, an elastomeric material sleeve 25, an inertia ring 19 and an inertia ring member 26 with V-belt grooves 30.

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Gebhardt and claim 18, it is our opinion that the only difference is the limitation that the annular machine part includes a planar hub ring and an annular machine element having an inner wall contiguous with an outer peripheral surface of the hub ring.

With regard to this difference, the examiner determined  
(answer, pp. 5-6) that

[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gebhardt by having a separate planar hub ring and annular machine element so that the inner wall of the annular machine element is contiguous with an outer peripheral surface of the hub ring in view of Withers for the purpose of ease of assembly.

We agree.

The arguments raised by the appellant (brief, pp. 6-7) are unpersuasive for the following reasons.

First, the appellant argues (brief, p. 7) that the flywheel of Gebhardt is not attached to an outer surface of the belt pulley. We do not agree. The claimed belt pulley reads on Gebhardt's support 4 and pulley unit 5 taken together. Thus, as shown in Figure 2 of Gebhardt his fly wheel-type ring 6 is attached to one of the outer surfaces of the belt pulley (i.e., the outer surface of support 4 which is readable as part of the claimed belt pulley).

Second, the appellant argues (brief, pp. 6-7) that it would not have been obvious to modify Gebhardt by the teachings of Withers since this would negate the compensatory feature of Gebhardt (i.e., the unitary nature of primary member 1) that permits the use of a plurality of parts for the secondary member 2 and that such a combination would increase the complexity of assembly and maintenance for Gebhardt. We do not agree. It is our view that the combined teachings of Gebhardt and Withers would have suggested such a modification to Gebhardt's primary member 1 for the self evident advantages thereof, such as ease of replacing a broken element.

For the reasons set forth above, the decision of the examiner to reject claim 18 under 35 U.S.C. § 103 is affirmed.

Dependent claims 19 through 22 have not been separately argued by the appellant. Accordingly, these claims will be treated as falling with independent claim 18. See In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528

(Fed. Cir. 1987); and In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978). Thus, it follows that the decision of the examiner to reject claims 19 through 22 under 35 U.S.C. § 103 is also affirmed.

CONCLUSION

To summarize, the decision of the examiner to reject the claims under appeal is affirmed with respect to claims 18 through 22 but is reversed with respect to claims 13 through 16.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JAMES M. MEISTER	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
NEAL E. ABRAMS	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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	)	
JEFFREY V. NASE	)	
Administrative Patent Judge	)	

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APPEAL NO. 97-0766 - JUDGE NASE  
APPLICATION NO. 08/287,448

APJ NASE

APJ MEISTER

APJ ABRAMS

DECISION: **AFFIRMED-IN-PART**

Prepared By: Gloria Henderson

**DRAFT TYPED:** 11 Aug 98

**FINAL TYPED:**